Panasonic

Operating Instructions

TV/VCR Combination

TC–21SV10S
TC–21SV10M *G-CODE*
TC–21SV10H *G-CODE*
TC–14SV10S
TC–14SV10M *G-CODE*
TC–14SV10H *G-CODE*

Please read these instructions before operating your set and retain them for future reference.

TQB4G0134

Dear Panasonic Customer

Welcome to the Panasonic family of customers.

We hope that you will have many years of enjoyment from your TV/VCR combination. To obtain the maximum from your set, read these instructions before making any adjustments and retain them for future reference.

Retain your purchase receipt, and note down the Serial Number of your set in the space provided on the rear cover of this Instructions book.

Copyright

You may record TV broadcasts and musical programmes for your personal entertainment only.
You are not permitted to use them for any other purpose without the consent of the copyright holder.

G–Code Recording System

Recording is now easier than ever: Simply enter the G–Code number provided in the programme schedule column carried by newspaper and magazines.

* G–Code is a trademark applied for by Gemstar Development Corp.
G–Code system is manufactured under license from Gemstar Development Corporation.

Note :

Playback and Recording of S–VHS type tape is unavailable on this unit.

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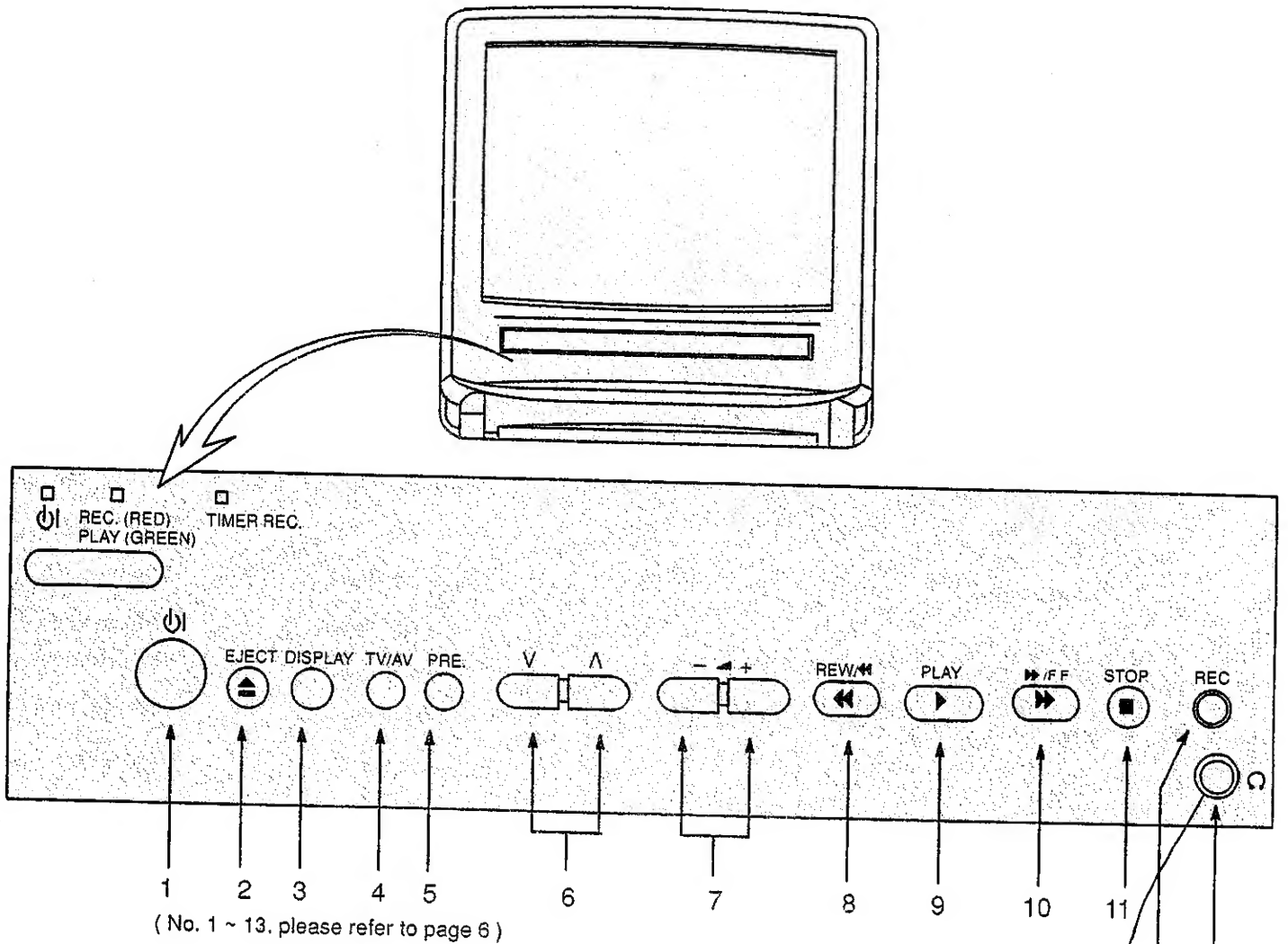
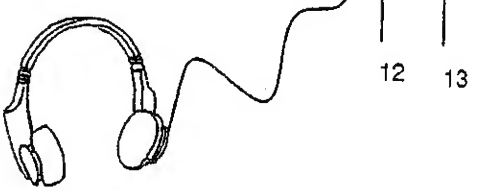
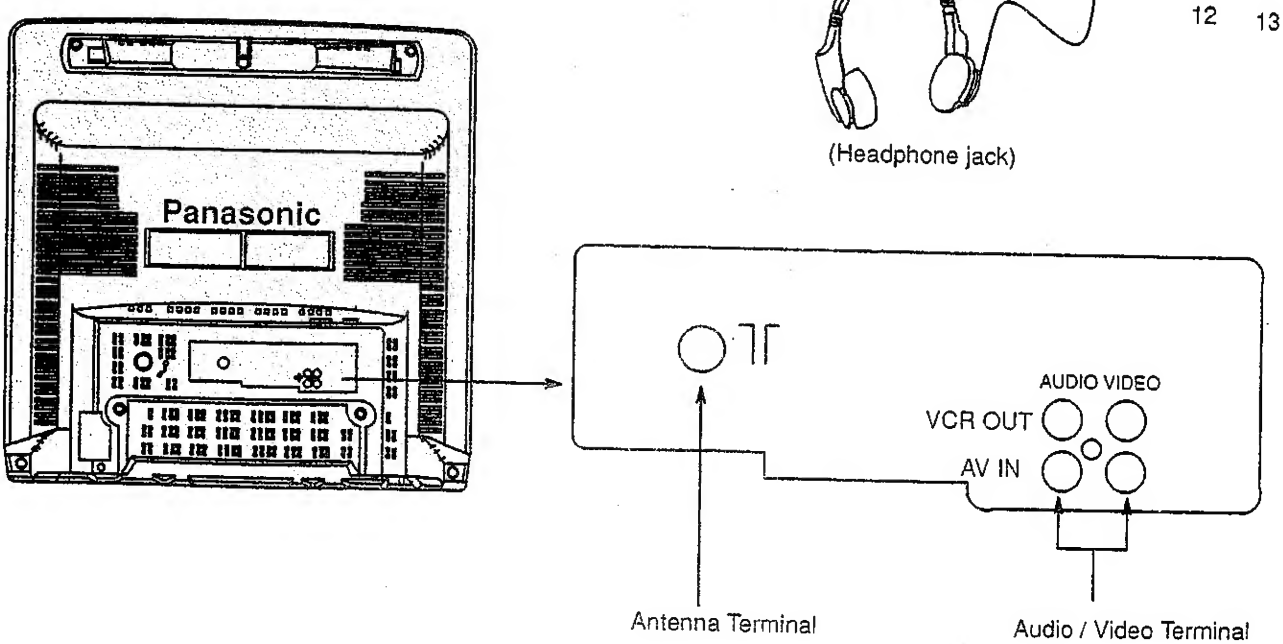
Location of Control (21 inches series)



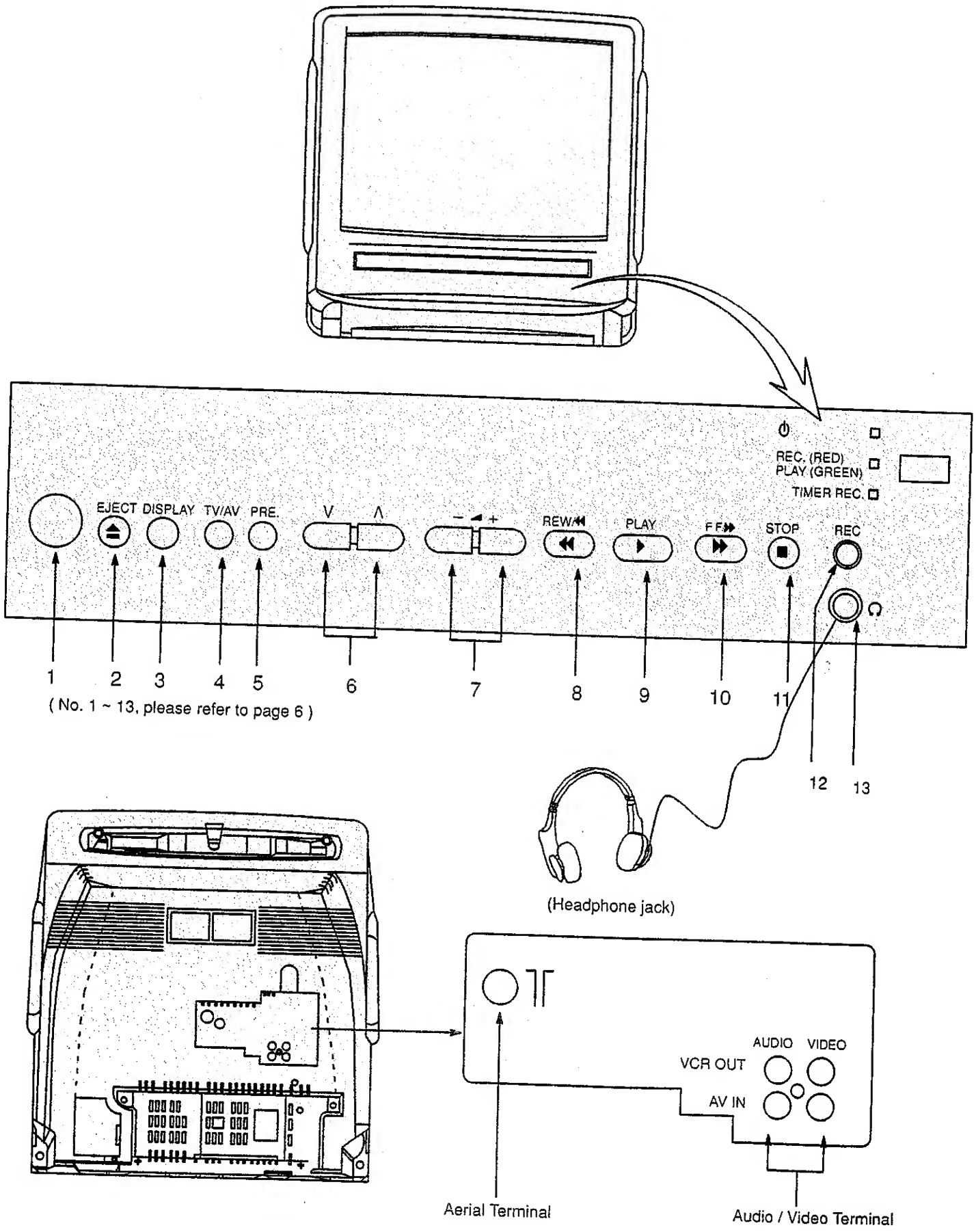
(No. 1 ~ 13. please refer to page 6)



(Headphone jack)

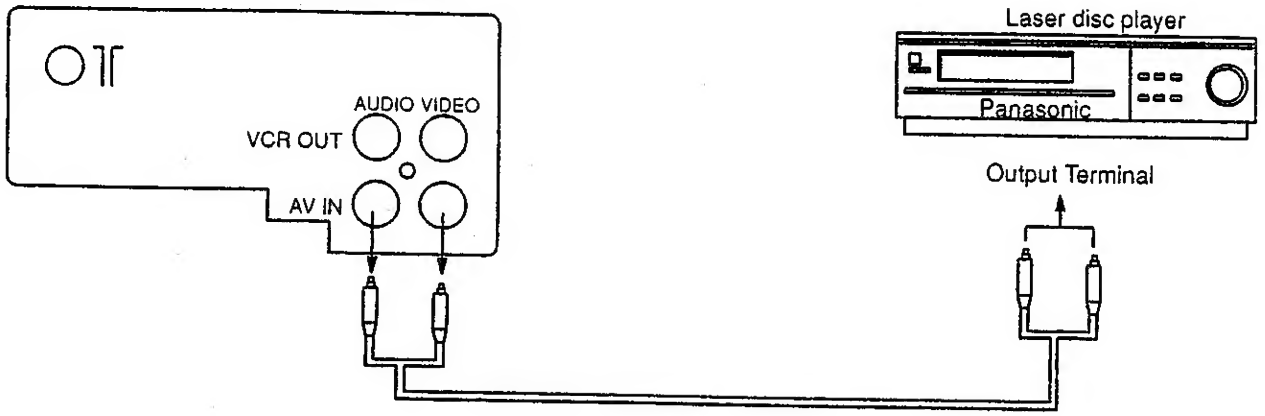


Location of Control (14 inches series)

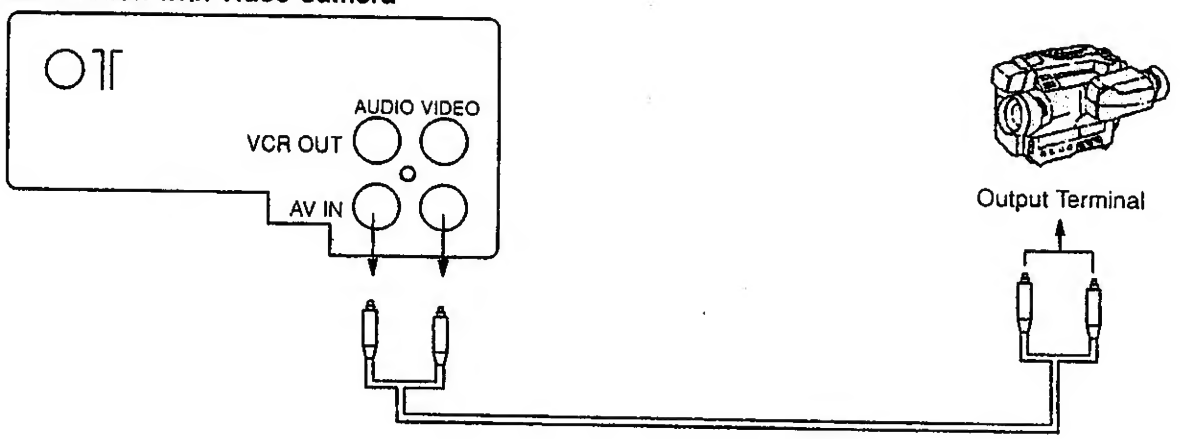


Connections

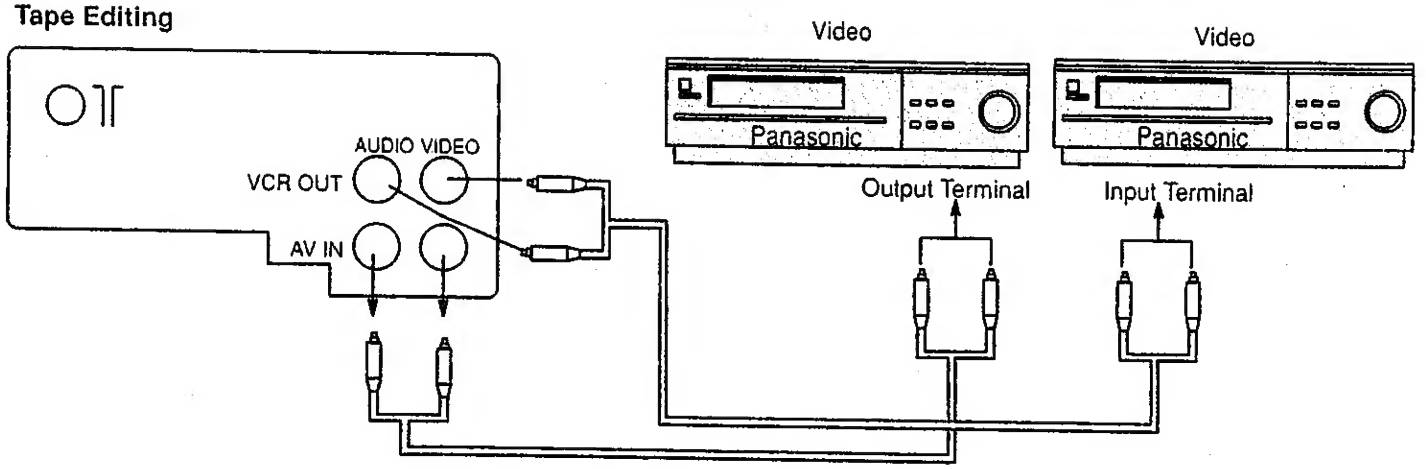
Connection with Laser Disc Player



Connection with Video Camera



Tape Editing

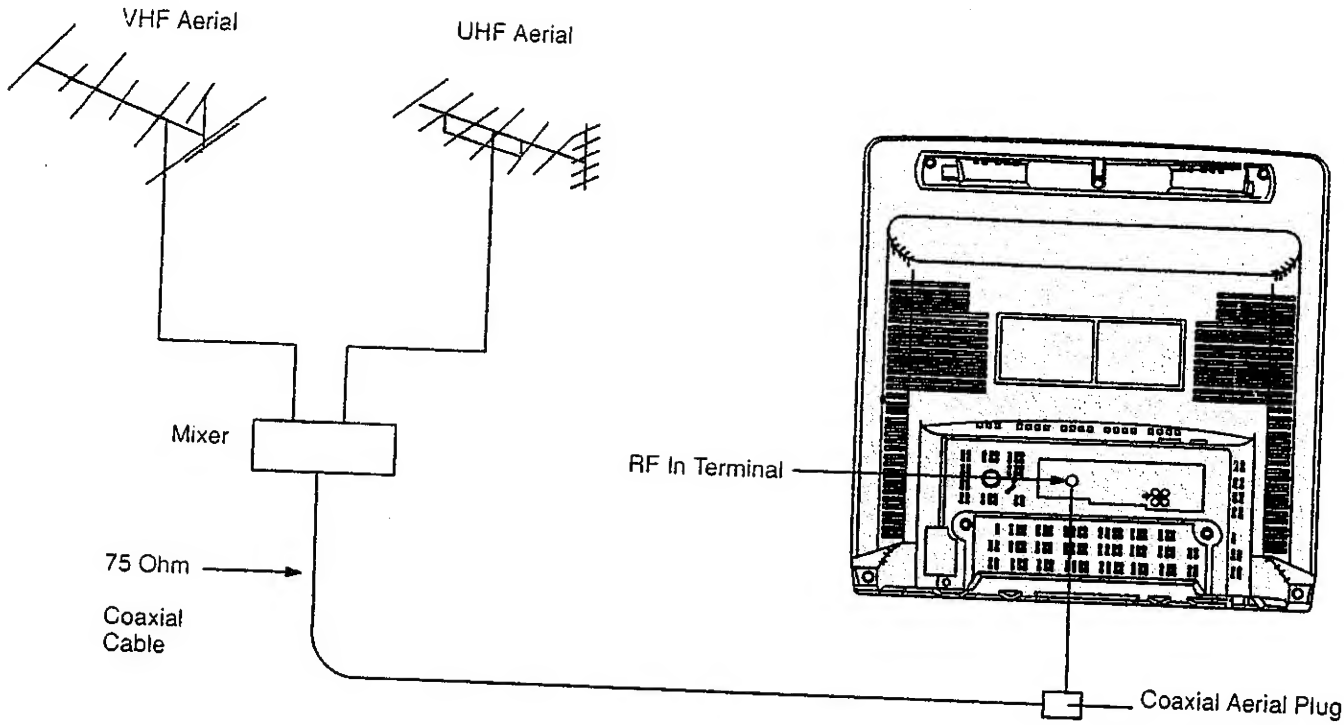


Note:

1. When AV mode is selected, and that AV has no input picture signal, the Background Colour of the TV screen will change Blue. (This only occurs if the Blue–Back function is set to the ON condition)

2. At times the picture or sound will be distorted if the input and output terminals from one video tape recorder are connected to the unit, and the unit is set to AV mode. This is not a mulfunction. Select the input switch on the video tape recorder side to "Tuner".

Antenna Connection

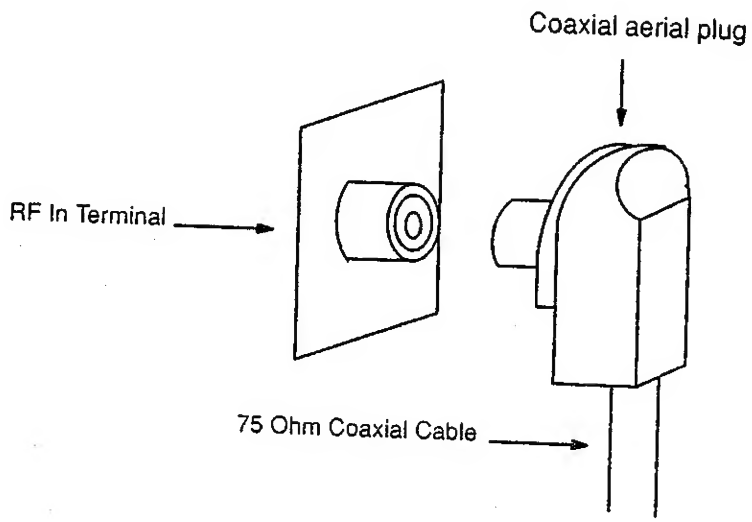


To obtain the best quality picture and sound, an external antenna, the correct cables (75 Ohm coaxial) and the correct terminating plug will be required.

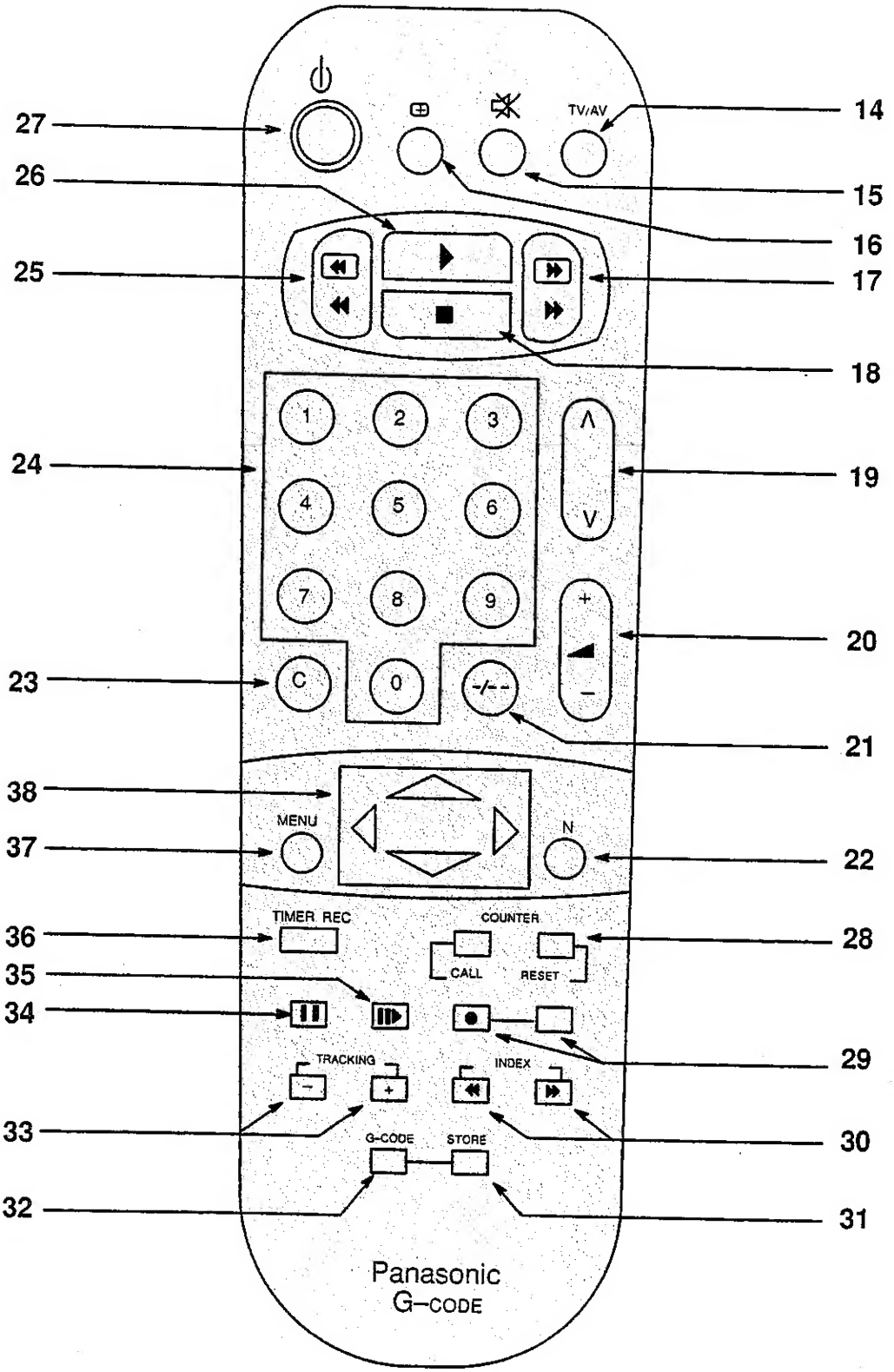
If a communal antenna system is used, you may require the correct connection cable and plugs between the wall antenna socket and your television receiver.

Your local Television Service Dealer may be able to assist you in obtaining the correct antenna system for your particular area and accessories required.

Any matters about antenna installation, upgrading of existing systems or accessories required, and the cost incurred, are the responsibility of the customer.



Remote Control Transmitter



NOTE :

G-CODE button and STORE button for TC-21SV10M, TC-21SV10H, TC-14SV10M and TC-14SV10H only.

Location of Control (Remote Control Transmitter and TV)

No.	Descriptions
1	Power Switch Button
2	Eject Button (VCR)
3	Display Button
4	TV/AV Selection Button
5	PRE. (PRESET) Button
6	Programme Number Up or Down Button
7	Volume Up or Down Button
8	REW (Rewind) Button
9	PLAY Button
10	FF (Fast Forward) Button
11	STOP Button
12	REC. (Record) Button
13	Headphone Terminal
14	TV/AV Selection Button
15	Sound Mute Button
16	Recall Button
17	Fast Forward Button
18	Stop Button
19	Programme Number Up or Down Button
20	Volume Up or Down Button

No.	Descriptions
21	Two Digit Programme Number Selection Button
22	Normalization Button
23	Channel Selection Button
24	Direct Programme Number Selection Button
25	Rewind / Review Button
26	Play Button
27	Stand–by Button
28	Counter Reset
29	Record Button
30	INDEX Search Button
31	G–Code Store Button
32	G–Code Button
33	Tracking Adjustment Button
34	Pause Still Button
35	Still Advance Button
36	Timer Record Button
37	Menu Selection Button
38	Position Button

Remote Control Transmitter : General Operations

1. TV/AV Selection Button

Press this button to select AV mode or TV mode.

2. Sound Mute Button

Press this button to mute the sound.

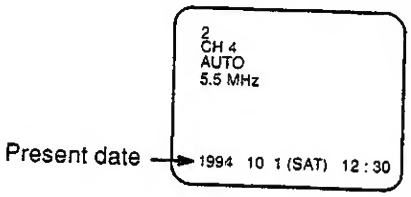
To cancel the mute mode :

1. Press this button again
2. Press the Volume Up or Down button.

3. Recall Button

Press this button to display the current Programme Number, Channel Number, Colour System, Sound System, Off–Timer and Present Date mode.

In AV mode, a blue colour screen appears if there is no AV signal (when the recall function is off).

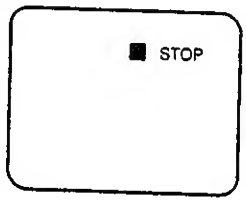


4. Fast Forward Button

Press to fast forward the tape. During the playback mode, press this button to view the picture in forward rapidly.

5. Stop Button

Press to stop the tape.



6. Programme Number Up and Down Buttons

Press to select the next higher or next lower Programme Number.

7. Volume Up and Down Buttons

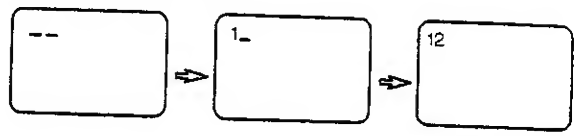
Press to adjust the sound volume level.

8. Two Digit Programme Number Selection Button

Press the button and followed by the required numbers to select Programme Number from 10 to 59.

e.g. To select Programme Number 12.

1. Press this button once.
2. Press button number " 1 ".
3. Press button number " 2 ".



9. Normalization Button

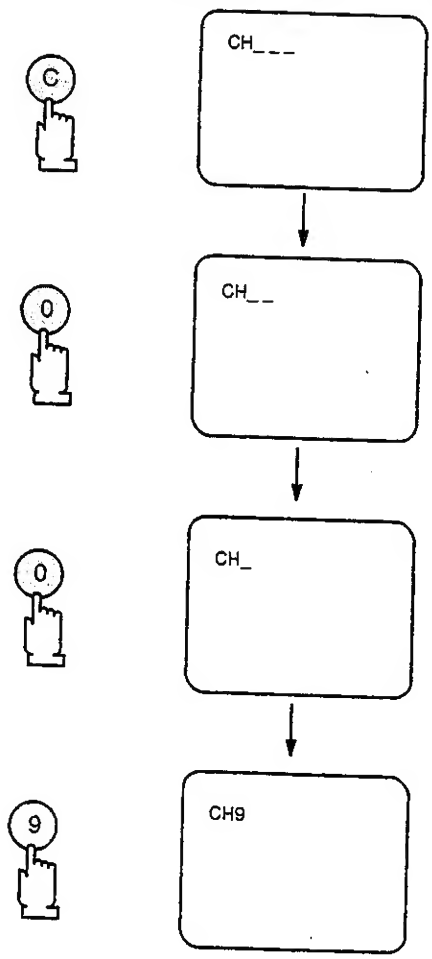
This button can be used for setting the Colour, Tint (NTSC only), Brightness, Contrast and Sharpness

When this button is pressed, all functions setting are reset to the factory preset level.

10. Channel Selection Button

You can select the actual channel number which can be received in your area directly.
Press the "C" (Channel) button, then select the desired channel directly.

e.g. To select broadcast transmission Channel Number 9.



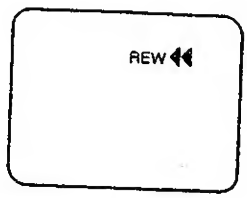
Remote Control Transmitter : General Operations

11. Programme Number Selection Button

Press one of these buttons to select Programme Number (0 ~ 9).

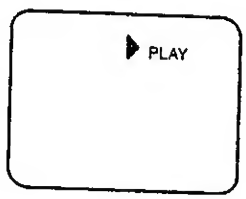
12. Rewind/Review Button

Press to rewind the tape.
During the playback mode, press this button to view the picture in reverse rapidly.



13. Play Button

Press to playback the tape.



14. Power Stand–by Button

Press the button to switch the TV set off.

To switch back on perform one of the following :

a. Press Stand–by button again.
b. Press one of these Direct Programme Number Selection buttons on the remote control.
c. Press Programme Number Up or Down buttons on the TV set or on the remote control.

Note :

Do not leave your TV set in stand–by mode for a long period of time. It is better to switch your TV off when you are away.

15. Counter Reset

CALL : Press the button to show the playback time after inserting tape.
Press once again to cancel.

RESET : Press the button to reset the counter.

16. Record Button.

Press these buttons at the same time to record.

17. INDEX Search

Please refer to page 22.

18. G–Code Store Button

Please refer to page 22.

19. G–Code Button

Please refer to page 20 and 21.

20. Tracking Adjustment Button

Press these buttons "+" or "–" to adjust for best picture and to minimize any vertical jitter during still–picture playback.

21. VCR Pause Still Button

By pressing in playback mode, the tape will be stopped temporarily.The picture will pause.

22. Still Advance Button

While PAUSE / STILL mode, press to advance the picture one frame at a time.

23. Timer Record Button

Please refer to page 18.

24. Menu Selection Button

Please refer to page 15 and 16.

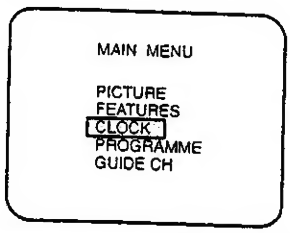
25. Position Buttons (Left or Right, Up or Down)

Please refer to page 15 to 22.

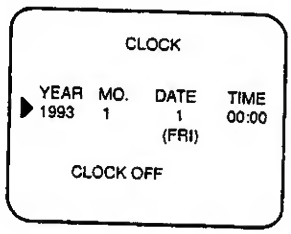
Timer Setting Operation

The timer recording indicator (orange) will flash on and off when the timer has not been set.

1. Press the "MENU" button and select "CLOCK" by using the Position Up or Down button.



Display the "CLOCK" screen by using the Position Left or Right button.



Example, to set October 1st, 1994.

–Shift the cursor to "YEAR" by using the Position Left or Right button and set to "1994" by using the Position Up or Down button.

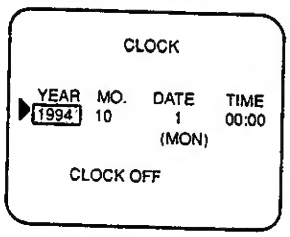
–Shift the cursor to "MO."(MONTH) by using the Position Left or Right button and set to "10" by using the Position Up or Down button.

–Shift the cursor to "DATE" by using the Position Left or Right button and set to "10" by using the Position Up or Down button.

Note :

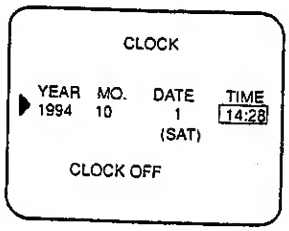
The selected item is in Red colour.

The on–screen will change as follows :



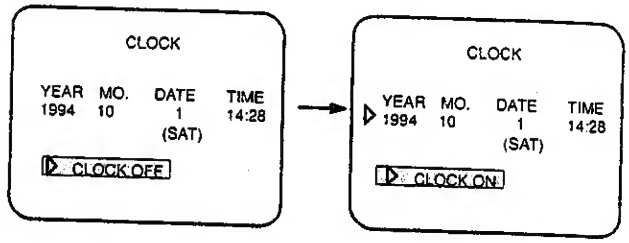
Example, to set the time 14:28

– Shift the cursor to "TIME" by using the Position Left or Right button and set the figure "14" and "28" by using the Position Up or Down button.



2. Put the cursor in the place of " ▶ " by using the Position Left or Right button.
If you did not move the cursor to the " ▶ " location, you will not be able to move the cursor to the clock.

3. To change "CLOCK OFF" mode to "CLOCK ON" mode, shift the cursor to "CLOCK OFF" by using the Position Up or Down button and press the Position Left or Right button. The clock starts from 14:28:00



4. Press the "MENU" button twice.

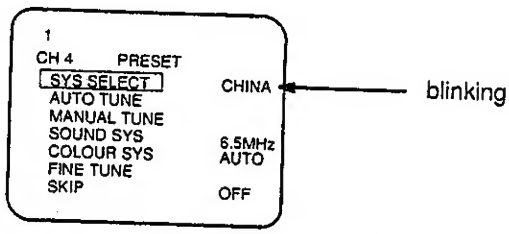
Note :

1. If you wish to change the settings, use the Position Up or Down buttons and using the Position Left or Right buttons, and move the cursor to the location you wish to change. Then change the setting time and turn the clock "off" and back "on".
2. If you attempt to start the video mode in the VCR Menu without setting the timer, the unit will automatically bring up the clock screen.
3. The unit will accept dates from 1988 through to December 31, 2087.

Country System Selection

Before AUTO SEARCH tuning and MANUAL SEARCH tuning, set the "SYSTEM SELECT" mode as explained below.

1. Press the "PRE." (PRESET) button, setting the Preset Menu to "SYS SELECT".

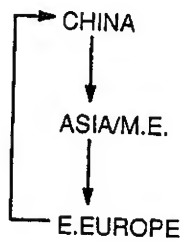


2. Select the appropriate System by pressing the Volume Up "+" or Down "–" button on the TV set.

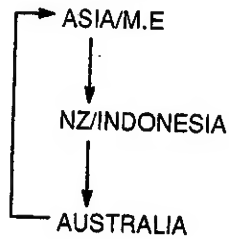
The system select indicator will change as follows:

TC–21SV10H and TC–14SV10H

TC–21SV10S and TC–14SV10S



TC–14SV10M and TC–21SV10M



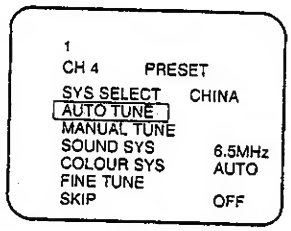
System Select by Country

SYSTEM SELECT	COUNTRY
CHINA	China
HK/UK	Hong Kong, United Kingdom
ASIA/M*E	Malaysia, Singapore, Thailand, Asia countries, Kuwait, Saudi Arabia, United Arab Emirates, Middle East Countries, etc.
E* EUROPE	CIS, Poland, etc.

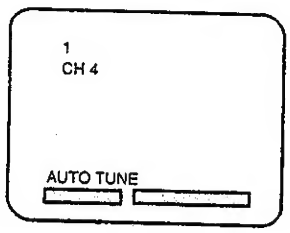
Tuning Procedure

Automatic Search
(Country System must already be set)

1. Press the "PRE. (PRESET)" button twice.
   The on-screen display appear as shown:



2. Press the Volume Up "+" or Down "–" button on the TV set.



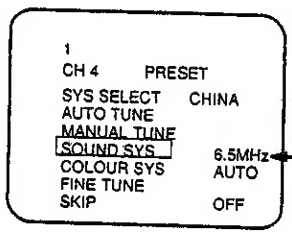
The best tuning position is automatically memorized.

3. After all stations are tuned, the on-screen display will automatically change from "AUTO TUNE" to "SOUND SYS". Confirm the sound condition of each Programme Number by pressing the Programme Number Up button.

4. If the Sound is not clear or no sound is produced on a Programme Number, press the Volume Up "+" or Down "–" button to improve the Sound quality.

You can select one of the sound system as below:

MODEL	SOUND SYSTEM
TC–14SV10H TC–21SV10H	6.0 MHz ⇄ 6.5 MHz
TC–14SV10S TC–21SV10S	5.5 MHz ⇄ 6.5 MHz
TC–14SV10M TC–21SV10M	5.5 MHz

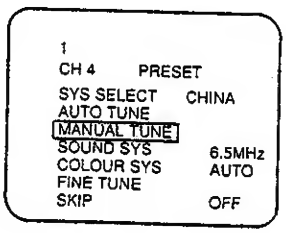


5. Use the Programme Number Up button to sequentially check each station.

6. After completed, press the "PRE. (PRESET)" button 4 times to return the set to the normal viewing condition.

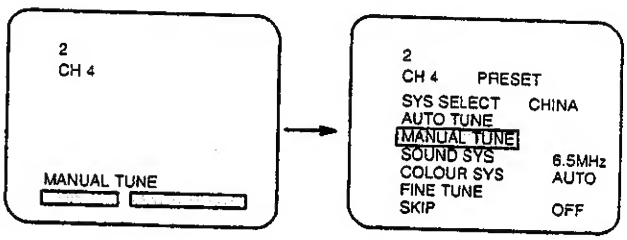
Manual Search
(Country System must already be set)

1. Press the "PRE. (PRESET)" button three times.
   The on-screen display appear as shown:



2. Select the desired Programme Number.

3. Press the Volume Up "+" or Down "–" button, the TV station broadcasting on the next higher or lower frequency will be automatically tuned and memorized.



If an undesired TV stations is received, press the same button again until the desired TV station is tuned.

You can also select a specific programme number by pressing the desired programme number after pressing the "C" (Channel) button. (Refer to page 7)

4. Press the "PRE. (PRESET)" button.

5. Select the Sound system by pressing the Programme Number Up button.

If the Sound is not clear or no sound is produced on a Programme Number, press the Volume Up "+" or Down "–" button to improve the Sound quality.

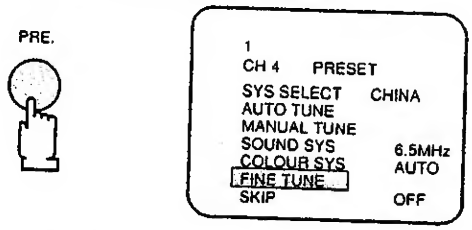
6. After completed, press the "PRE. (PRESET)" button 4 times to return the set to the normal viewing condition.

Fine Tuning operation

Under normal reception condition, this function is not used. However, in areas of poor reception or constant interference, a slight adjustment on the fine tuning can improve the picture and sound quality.

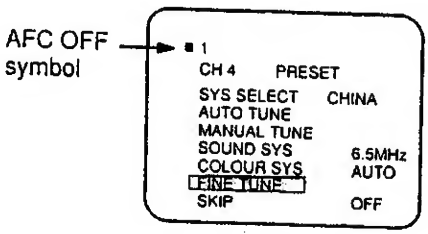
How to set the Fine Tuning Operation.

1. Select the desired Programme Number.
2. Press the "PRE." (PRESET) button 6 times.
   The on-screen will appear as shown :



3. Press either the Volume Up "+" or Down " – " buttons continuously.

   When the above fine tuning operation has been performed, the " ■ " symbol appear on the left of Programme Number. The AFC function is deactivated.

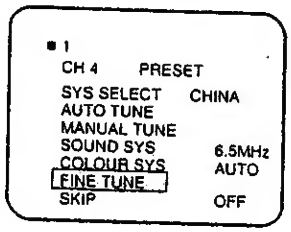


4. Press the "PRE." (PRESET) button twice to return the TV set to the normal operating mode.

How to Cancel the Fine Tuning Operation.

If you want to reset this Programme Number to the automatically tuned condition with the AFC activated, perform the following steps :

1. Press the " PRE." (PRESET) button 3 times.
   The on-screen will appear as shown :

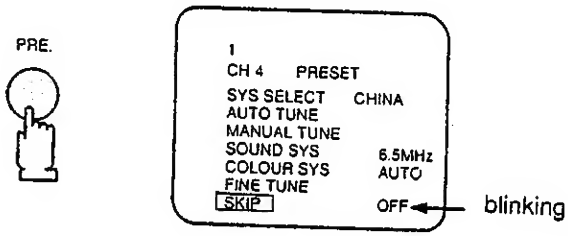


2. Press either the Volume Up "+" or Down "–" buttons on the TV set.

3. Press the " PRE." (PRESET) button 5 times to return the TV set to the normal operating mode.

Programme Number Skip Operation

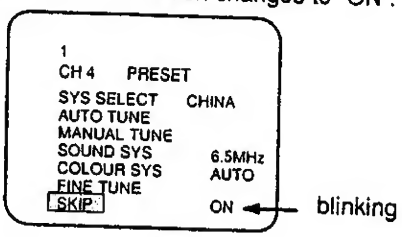
1. Press the "PRE." (PRESET) button 7 times.
   The on-screen will appear as shown :



2. Select a Programme Number you want to skip, by pressing the Programme Number Up or Down button.

3. Press the Volume Up "+" or Down "–" button on the TV set.

   The displayed "OFF" condition changes to "ON".

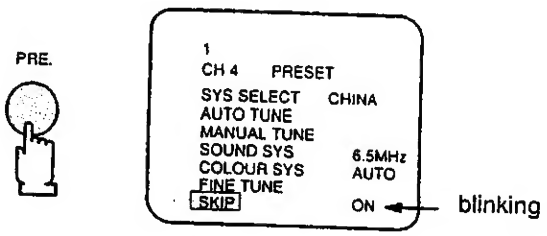


4. If more Programme Number are to be skipped, repeat step 2 and 3.

5. Press the "PRE." (PRESET) button once to return the TV set to normal viewing condition.

How to Cancel the Skip Operation.

1. Press the "PRE. (PRESET)" button 7 times.
   The on-screen will appear as shown :



2. Select the skipped programme number by pressing the Programme Number Up or Down button.

3. Press the Volume Up "+" or Down "–" button on the TV set.
   The displayed "ON" condition changes to "OFF".

   If more Programme Numbers are to be cancelled, repeat step 2 and 3.

4. After the operation is completed, press the "PRE." (PRESET) button once to return the TV set to the normal operating mode.

Sound System Selection

(TV mode only)

1. Press the "PRE." (PRESET) button 4 times. Setting the Preset Menu to "SOUND SYS".

2. Press the Volume Up "+" or Down "–" button on the TV set until the optimum sound is obtained.The selected sound system is automatically memorized.

3. Press the "PRE." (PRESET) button 4 times to return to normal operating mode.

Note :

Each model or each country has different Sound System depending on type of broadcasting transmission.

MODEL	SOUND SYSTEM
TC–14SV10H TC–21SV10H	6.0 MHz ⇄ 6.5 MHz
TC–14SV10S TC–21SV10S	5.5 MHz ⇄ 6.5 MHz
TC–14SV10M TC–21SV10M	5.5 MHz

Colour System Selection

1. Press the "PRE." (PRESET) button 5 times. Setting the Preset Menu to "COLOUR SYS".
(In AV mode, press the "PRE." (PRESET) button once).

2. Press the Volume Up "+" or Down "–" button until the optimum image is produced.
(each model has different Colour System)

The colour system will change as shown below:
AUTO → PAL → NTSC 3.58 → NTSC 4.43 →

3. Press the "PRE." (PRESET) button 3 times to return to normal operating mode.
The selected Colour System is automatically memorized.
(In AV mode, press the "PRE." button once)

Note :

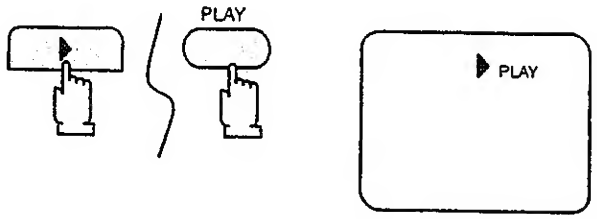
Each model or each country has different Sound System depending on type of broadcasting transmission.

MODEL	COLOUR SYSTEM
TC–14SV10H TC–21SV10H	TV AUTO → PAL → NTSC4.43 → AV AUTO → PAL → NTSC4.43 → NTSC 3.58 →
TC–14SV10M TC–21SV10M	TV AUTO → PAL → NTSC4.43 → AV AUTO → PAL → NTSC4.43 → NTSC 3.58 →
TC–14SV10S TC–21SV10S	TV AUTO → PAL → SECAM → NTSC 4.43 → AV AUTO → PAL → SECAM → NTSC 3.58 → NTSC 4.43 →

VCR : General Operation

1. PLAY Button

Press to playback the tape.

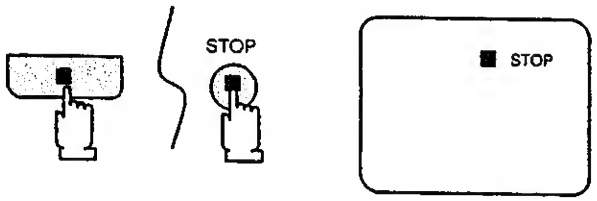


Note :

- Whenever playing a tape, the mode is automatically switched over to the "VIDEO" mode even if the TV is set to the "TV" mode.
- When a cassette tape without erasure prevention tab is inserted, playback starts automatically.
- When playing starts, VCR indicator lights up.
- When the tape reaches its end, it is rewound to the beginning automatically.

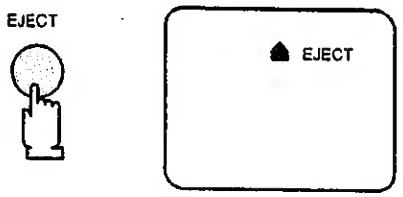
2. STOP Button

Press STOP button to stop the tape.



3. EJECT Button

Press this button to eject the tape.

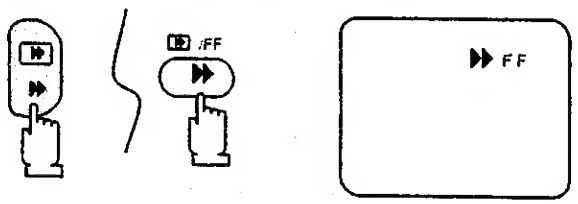


Note :

Ejection is possible in stand-by condition.

4. FF (Fast Forward) / Cue Button

Press this button to fast forward the tape.



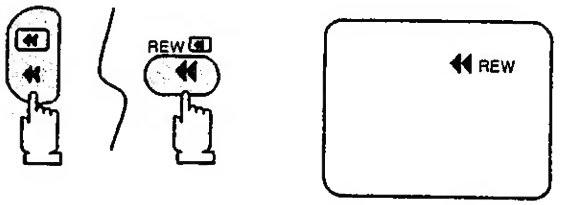
During playback mode, holding this button down will allow you to view the picture in the forward direction rapidly.

Note :

When the tape reaches its end, it is rewound to the beginning automatically.

5. REW (Rewind) /Review Button

Press the button to rewind the tape.



During playback mode, holding this button down will allow you to view the picture in reverse rapidly.

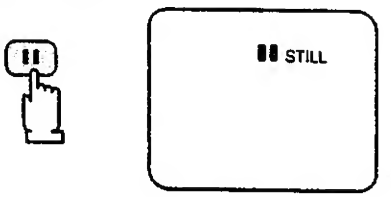
Note :

When the power is switched off during rewinding, the power of the TV is shut off immediately, but the power of the VCR section is shut off only after completion of rewinding (REWIND SHUT OFF).

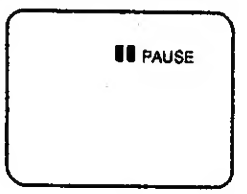
6. PAUSE / STILL Button

Press to stop the tape temporarily during playback and recording.

During playback : Still picture



During recording : To interrupt recording



Note :

- When Pause and Still is continued for more than 5 minutes, it is automatically cancelled for protection of the tape.
- The VCR indicator (Red) blinks during pause.
- When either FF/Cue playback, REW/Review play back is continued for more than 10 min., mode returns to the normal playback mode for protection of the tape.
- If vertical jitter occured during still-picture playback, refer to TRACKING button explanation.

VCR : General Operation

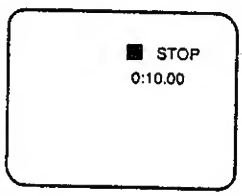
7. Still/Advance Button

Press this button during Still mode. Each time you press this button, the still picture is advanced, frame by frame.

When this button is pressed during playback, the mode turns to slow playback (when you hold slow playback mode for more than 10 min., the mode turns to STOP mode). Press either "PLAY" button to cancel.

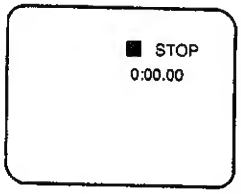
8. Displaying the Tape Counter

Make sure that a tape is inserted. The playback time after insertion of the tape is shown after pressing the CALL button. Press the button once again to cancel.

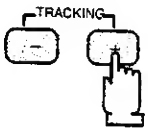


9. RESETTING the Tape Counter

By pressing this button, the counter reset to 0:00.00.



10. TRACKING Button



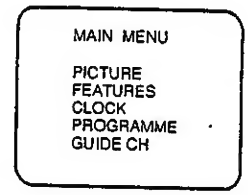
When the playback picture is not clear, press the TRACKING buttons "+" and "–" to adjust for best picture. For vertical locking adjustment. Use the "+" and "–" buttons to minimize any vertical jitter during still–picture playback.

Note :
When this button is pressed, the mode turns to manual tracking mode.
Mode returns to automatic tracking mode when the tape is inserted.

Main Menu Operation

The menus can be displayed on the screen by pressing the "MENU" button.

After you press the "MENU" button, on–screen display appear as below :



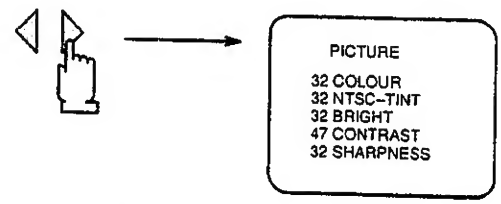
The PICTURE, FEATURE, CLOCK, PROGRAMME and GUIDE CH can be selected by using the Position Up or Down buttons.

These items can be adjusted or set–up by using the Position Left or Right button.

a) Select the PICTURE menu and press the Position Left or Right button.

The colour control function (COLOUR, NTSC–TINT, BRIGHT, CONTRAST and SHARPNESS) will be displayed. It can be adjusted by pressing these buttons.

Press the Position Up and Down button to shift the cursor to another items of colour control function.



b) Select the FEATURES menu and press the Position Left and Right button.

The on–screen will display the OFF TIMER, BLUE BACK and REPEAT mode.

Explanations as explained on page 16

c) Select the CLOCK menu and press the Position Left and Right button.

Explanations are on page 9.

d) Select the PROGRAMME menu and press the Position Left and Right button.

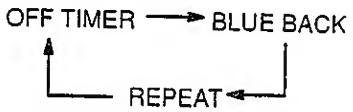
Explanations are on page 18.

e) Select the GUIDE CH menu and press the Position Left and Right button.

Explanations are on page 20, 21 and 22.

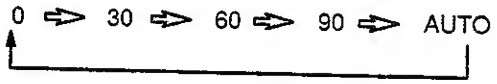
Feature Menu Operation

1. Press the "MENU" button.
2. Select the "FEATURES" by using the Position Left or Right button.
3. Select the desired item either OFF TIMER mode, BLUE BACK mode or REPEAT mode by using the Position Up or Down button.



OFF TIMER mode

The TV set can be preset to switch off after a fixed period of time. By pressing the Position Left or Right button, you can select the preset time either 30, 60, 90 or AUTO mode.



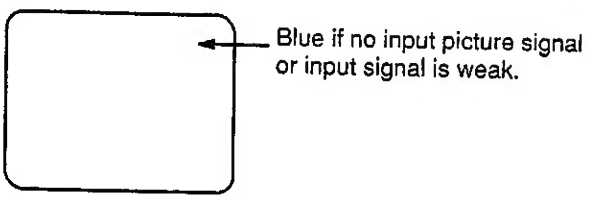
In Auto mode, if the TV set is not switched off, it will automatically go to stand-by condition 5 minutes after the TV station ends broadcasting.

Note :

(Setting Off-Timer to AUTO mode will not operate when the Television set is in AV mode.)

BLUE BACK mode

When no picture signal is input, or the signal is weak, the screen reverts to a blue background colour. Disable this Feature to continue watching very weak signals.



Note :

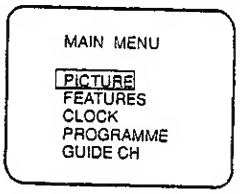
If BLUE BACK Mode is set on while a VCR signal is being viewed, selecting CUE or REVIEW or when tracking is deviated, may cause the screen to revert to the blue background colour. Disable this Feature to view correctly.

REPEAT Mode

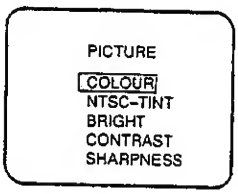
The tape is played back repeatedly from the start to the end of the recorded content.

Picture Menu Adjustment Operation

1. Press the "MENU" button.

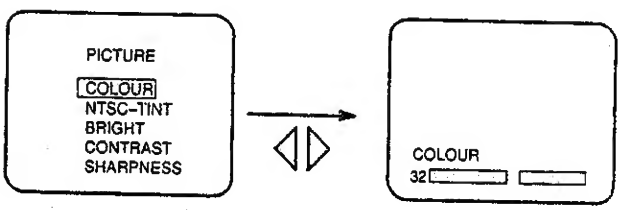


2. Select the "PICTURE" by using the Position Up or down button.
3. Select the desired item either COLOUR, NTSC-TINT, BRIGHT, CONTRAST and SHARPNESS by using the Position Left or Right button.



4. The level of selected item can be adjusted by pressing the Position Left or Right button.

   Right button : to less level
   Left button : to high level



Helpful Hint (NORMALIZATION BUTTON)

By pressing the Normalization "N" button on the Remote Control while the Picture menu is displayed, the selected menu will be changed to the Normal Mode.

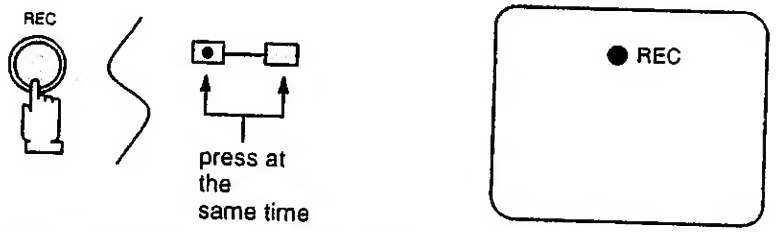
Normalization will not occur if the menu is not displayed when the "N" button is pressed.
The normal mode is the factory preset condition. Returning to this original condition is called "Normalization".

VCR Operation

Recording

1. Press the "REC." (Record) buttons to record a current programme (TV or AV Input).

2. Recording is started by pressing the "REC." (Record) button.



- When recording starts, VCR indicator lights up (Red)
- When a tape without erasure prevention tab is inserted, the tape is automatically ejected. Insert a tape with the exasure prevention tab still in place.
- The " " mark is displayed when there is no recording tape.

3. Recording may be stopped by pushing the STOP button.

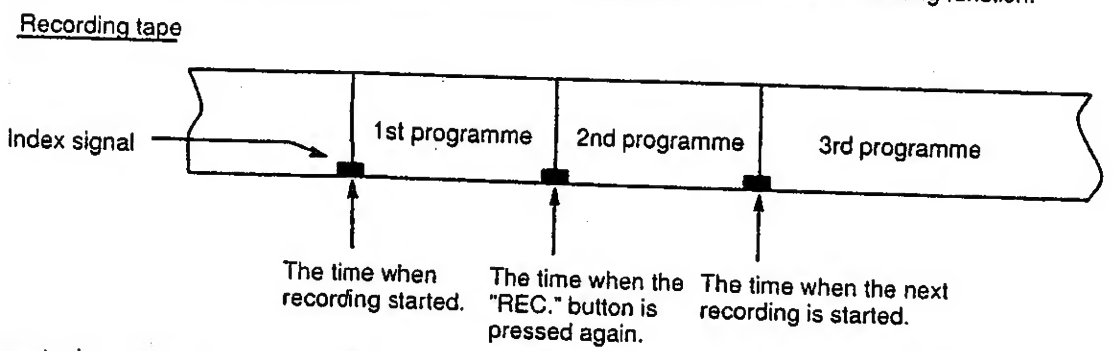
Helpful Hint

1. To avoid inadvertent erasure of an important recorded tape, break the erasure prevention tab of the cassette tape. By doing so, recording becomes impossible and erroneous erasure is prevented.
   Use cassette tape (two layers preferably) a cross the broken erasure prevention tab, to make re–recording possible again.

2. During recording, if another programme is to be recorded, push the "PAUSE" button, switch to another channel if desired, push the "PAUSE" button again, and recording will re–start.
   (The red VCR Indicator blinks during pause)

3. Recording in "S–VHS" format is not possible with this unit.

4. When the "REC." button is pressed at the starting of recording or during recording, an index signal is recorded. This index signal enables indexing of recorded programmes, for use with indexing function.



To prevent mis operation, leave minimum of approximately 5 min of tape between each recorded index signal.

Note :

1. The top of the picture may become distorted in the Cue, Review mode. This is not an indication of a mulfunction.

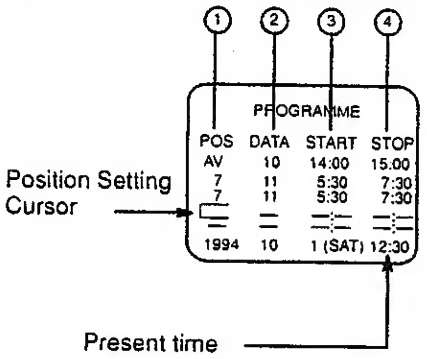
2. In the special playback modes, the Blue Back–ground function does not work, even if the screen becomes noisy.

3. The sound may be muted when playing back a tape with blurred picture.

VCR Operation

Programme Timer Recording

6 programme Timer Recording is possible.



1. **POS** (Position)

   Preset the programme number for the programme to be recorded.
   Preset programme number you want to record the programme from AV input. Skipped programme numbers are not displayed.

2. **DATE**

   Preset the date when the programme will be broadcast.
   The date can be preset as follows :

   - Presetting for one month in advance (from the present date).
   - Presetting of the same time everyday (DAY)
   - Presetting of the same time from Monday to Saturday (M – S)
   - Presetting of the same time from Monday to Friday (M – F)
   - Presetting of the same time of the same day of every week (SUN, MON, TUE, WED, THU, FRI, SAT)

3. **START**

   Preset the hour and minute when recording is to start.

4. **STOP**

   Preset the hour and minute when recording is to finish.

How to use the arrow Buttons

1. Press the "MENU" button to display the MENU screen.

2. Set the cursor to PROGRAMME by using the Position Up and Down buttons.

   Select PROGRAMME by using the Position Left and Right buttons.

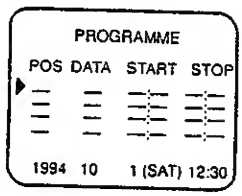
3. Shift the position setting Position Up and Down buttons. Set each items from step 1 to 4 as shown on left side. The cursor shifts right and left.

4. When a tape is inserted after Programme Timer Recording mode is set, the Timer Recording indicator lights up (orange).

VCR Operation

Presetting Method

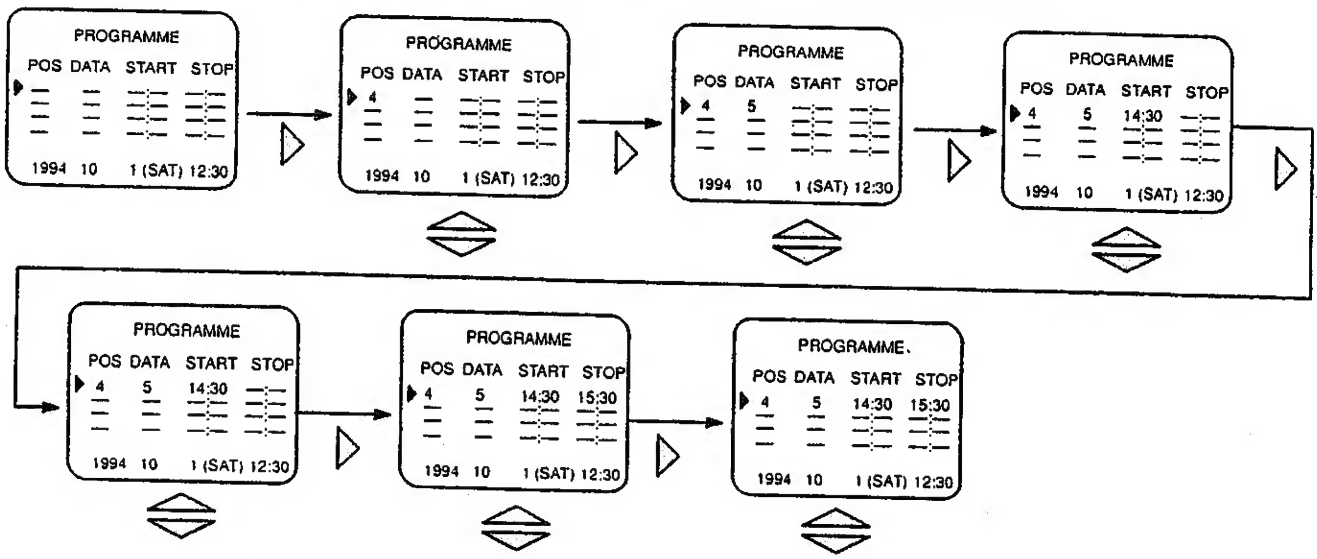
Press the "MENU" button, set the cursor to PROGRAMME by using the Position Up and Down buttons, and then select PROGRAMME by using the Position Left and Right buttons.



Note :

When the Timer Setting mode is not set, the Timer setting screen is displayed initially.

Set the Timer Recording mode by shifting the cursor.
For example, when you want to record programme No. 4 on Oct., 5 from 14:30 to 15:30 in the SP mode.



3. Insert a tape and push the "TIMER REC" button. The "TIMER REC" indicator lights up. Press again to cancel the timer recording.

Note :

- When the tape without erasure prevention tab is inserted, the tape is automatically ejected. Or when there is no recording tape, the TIMER-REC indicator blinks.

- Unless reservation via the timer is cancelled, it is impossible to operate the VCR and to eject the tape.

4. Press the "MENU" button twice, to return the set to the normal viewing condition.

Note :

Recording starts from approx. 20 sec. prior to the arrival of preset time.

Helpful Hint

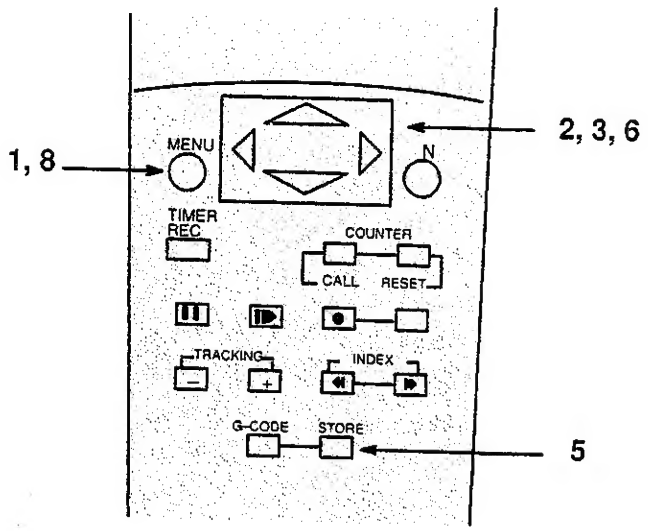
1. When you want to set another programme, shift the cursor to a line not yet set, and set it as described above.
2. To erase contents of the Timer Recording mode, shift the cursor to the line to be erased and push the (N) button.
3. After switching the TIMER REC indicator off by pressing the "TIMER REC" button, you can use the VCR as usual, except during the time for which Timer Recording mode is set. Insert a tape before recording starts and press the "TIMER REC" button.
4. When a preset time has passed, the contents of corresponding preset line is erased.
5. When you want to stop recording during Timer Recording, press the "TIMER REC" button.
6. When the TIMER REC Indicator is light on, Timer Recording is not performed.

VCR Operation

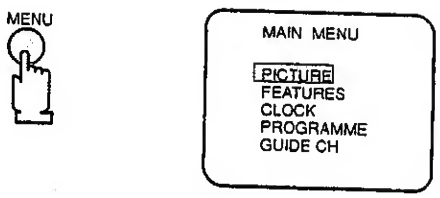
GUIDE CHANNEL (TC–21SV10M, TC–21SV10H, TC–14SV10M and TC–14SV10H only)

G–Code Programming Case 1

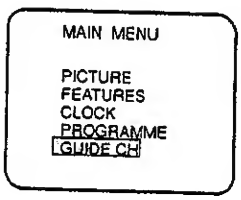
When the G–Code are printed on newspaper or magazines.
The Guide channel is a code dedicated to a broadcast station, and enables you to correctly receive broadcast stations using G–Code scheduling.
The Guide channel may differ from the actual TV channel, so care should be taken.



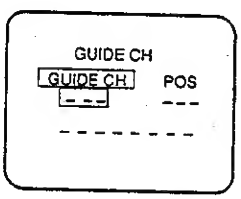
1. Press the "MENU" button.



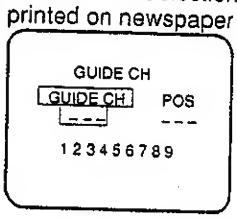
2. Select the GUIDE CH Menu by using the Position Up or Down button.



3. Press the Position Left or Right button.

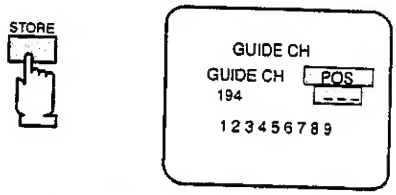


4. Push the "Direct Programme Number Selection" button and set the G–Code which is printed on newspaper or magazine.



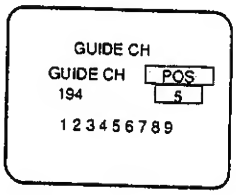
Note :
If you have entered the wrong number, press the "N" button.

5. Press the "STORE" button.



The Guide channel corresponding to the G–Code will be displayed.

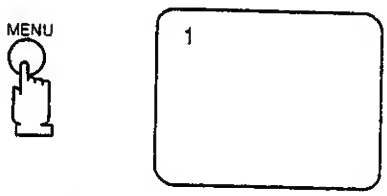
6. Set to the same Programme Number Position as you have set for the Guide channel using the Position Up or Down button.



Setting range : 0~59 ——————> AV

7. Repeat Steps 4 to 6 for each Guide channel.

8. After you finish setting all the Guide channels, press the "Menu" button twice.



Note :

1. To receive satellite stations, the satellite receiver must be connected to the AV Input Terminals and programme position must be set depending on the type of the connection made, set to programme number AV.

2. When the satellite receiver is connected by means of the RF coaxial cable, set to a Programme Number 0.

VCR Operation

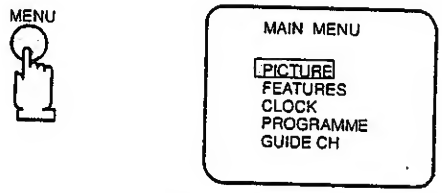
GUIDE CHANNEL (TC–21SV10M, TC–21SV10H, TC–14SV10M and TC–14SV10H only)

G–Code Programming Case 2

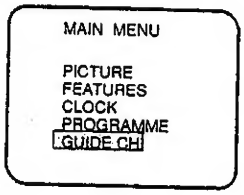
When channel guide for each broadcasting station is known in advance.

The Guide channel is a code dedicated to a broadcast station, and enable you to correctly receive broadcast stations using G–Code scheduling.
The Guide channel may differ from the actual TV channel, so care should be taken.

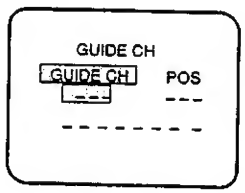
1. Press the "MENU" button.



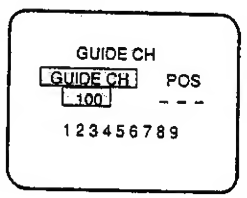
2. Select the GUIDE CH Menu by using the Position Up or Down button.



3. Press the Position Left or Right button.

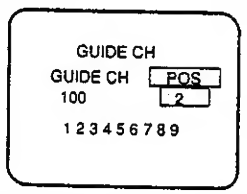


4. Set the Guide channel by pressing the Position Up or Down button.



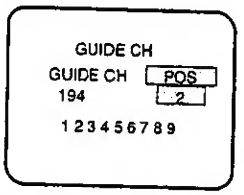
Setting range : 001 ~ 255.

5. Select the POS by using the Position Left or Right button.



The Guide channel corresponding to the G–Code will be displayed.

6. Set to the same Programme Number Position as you have set for the Guide channel using the Position Up or Down button.

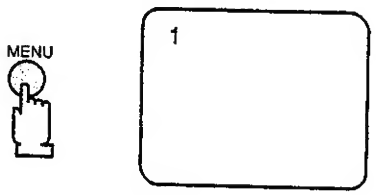


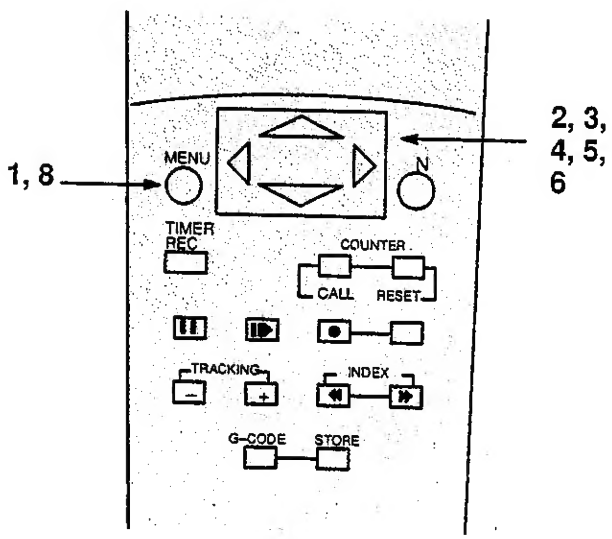
Setting range : 0~59 ——————> AV

Select the "GUIDE CH" by using the position Left or Right button.

7. Repeat Steps 4 to 6 for each Guide channel.

8. After you finish setting all the Guide channels, press the "Menu" button twice.





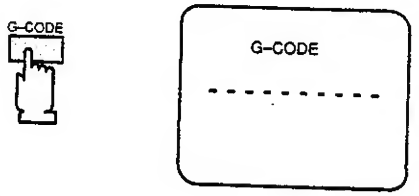
VCR Operation

G–Code Recording

You can schedule recording by inputting the G–Codes listed in

the TV programme columns in newapaper and magazines.
Always set to "Guide Channel" when reserving the G–Code.

1. Press the "G–CODE" button.

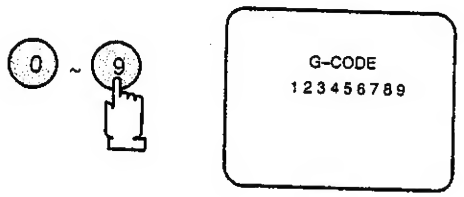


Note :

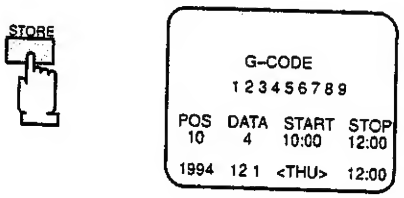
Upon pressing the G–Code button after presetting 6

programme timers recordings, programme screen is displayed.

2. Press the Direct Programme Number Selection button and set the G–Code.



3. Press the "STORE" button.



Note :

- The Input Code will flash on and off if there is a read error owing to an input miss.
- Press the Position Left or Right button during input to change each number entry at your option.
- To clear an input code which has already been entered, press the "N" button.

4. In case of other G–Code recording, Repeat steps 1 to 3 for

each programme.

5. Press the "MENU" button twice.

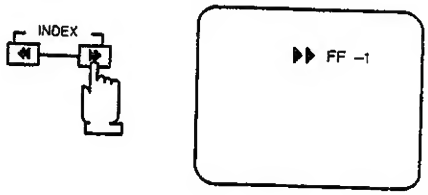
G–Code is a trademark applied for by Gemstar Development Corp.
G–Code system is manufactured under license from
Gemstar Development Corporation.

2. Press "Timer Rec"

Playback of Indexed Programme

It is possible to index programme recorded on this unit, to make locating specific programme start position faster. (The unit searches for a pre–recorded index signal and the corresponding programme is played back automatically). Insert a recorded cassette tape with index signals.

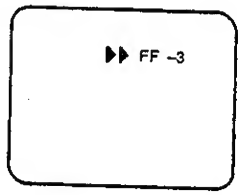
1. By pressing the Index Search buttons to designate many index signals backward of forward the unit should count off before stopping.



The diagram below shows a section of tape, with the VCR stopped between two index signals.

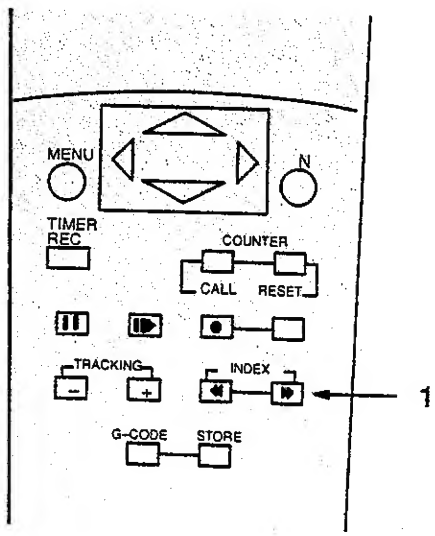
Note from the diagram that nom designate the start of a selected programme 2 programme back, the unit must count three index signals so in such a case you would set "3" not "2".

Setting range : 1 ~ 20.

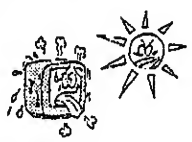
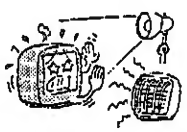


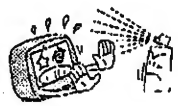
When a index signal is detected, the numbers displayed will be reduced.

When the specified index signal is detected, playback of the corresponding programme starts automatically.



Warnings and Cautions

	When a dew condensation phenome nom occurs, indication of "dew con-densation " appears and the cassette tape is ejected. Indication of "dew con-densation" ceases soon. When you want to operate the VCR. wait for a while until the said indication ceases. While "dew condensation" is indicated the VCR does not work even if you push any operations buttons, but you can watch the TV. Indication pf "dew condensation" will cease within several hours at latest. Such time may differ according to circumstances. As generally dew condensation ad-vances gradually, and indication of "dew condensation" may appear 10–15 minutes after the begining of dew condensation.
	Do not put the TV/VCR set in a place where it is exposed to the direct rays of the sun for a long time.
	Do not put the TV/VCR set in a place which is dirty or damp or near a strongly magnetic object.
	Always remove connection cable when moving the TV/VCR. When you carry the TV/VCR to a distant place, always wrap it in a blanket or some-thing protective.
	Do not give the TV/VCR a physical shock while carrying it.
	Do not put the TV/VCR set in a place where it is exposed to a spotlight, heating appliance, smoke, steam etc.
	Do not block the ventilating holes.
	Do not put heavy objects on the TV/VCR.

	Conditions which causes dew con densation are as follows: It may occur if the TV/VCR and the cassette tape were moved to anoth-er place where there are great changes of temperature and humidity. – A humid place where the air is thick with steam. – When the TV/VCR was suddenly moved from an air–conditioned room to a hot and humid place. – The room was heated quickly. When the rotary cylinder is stained with condensation droplets, the tape may adhere to the rotary cylinder. It may interfere with normal forwarding of the tape and the tape may be damaged.
	Do not spray insecticide or volatile solvent upon the TV/VCR. Do not allow rubber and vinyl products to contact the TV/VCR for long periods. The may cause changes in quality and peeling of the paint.
	Always pull out the power plug by holding the plug itself. Do not pull the cord.
	Do not bring a heating appliance close to the power cord.
	Do not place heavy objects across the power cord.
	Wipe off any dirt on the cabinet and operation panel with a soft cloth. – When you use a chemical dus tcloth, read the manual carefully. – When the dirt does not comes off, soak the cloth in a neutral detergent diluted with water and squeeze it dry and then wipe off the dirt. Then, wipe with a dry cloth.
	Do not put any vessel containing water on or near the TV set.

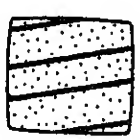
Before Requesting Service

When you suspect the TV is out of order, check the following points before requesting Service.
Refer to either the shop where the purchase was made or the nearest Authorised Service Centre if the mulfunction cannot be corrected.

Symptoms	Checks
No power supply.	– Is the power plug disconnected ? – Is the main power switched ON ?
The programme selected is not displayed clearly.	– Is the aerial connected properly ? – Is received signal weak ?
Spots appear on the screen.	Is the reception being disrupted by car, train, high tension cable, neon light inteference?
The picture has double or treble images.	– Has the direction of the aerial been changed ? It may changed after a severe wind. – Signal reflection from surrounding mountains or building may effect on the picture.
Interference pattern appears	Such symptoms may occur when the transmitting aerial for a radio station or a ham operator is near the TV.
The channel number does not disappear from the screen.	Is the RECALL button pressed ? – Push it again.
Inferior tint, light colour.	Have the Colour and Tint been adjusted ? (Check the adjustment values.)
The TV sometimes produces a cracking sound.	If the picture and sound are normal, it may probably be the sound from the cabinet which expands and contracts according to change of room temperature. This is not a malfunction.
The Remote Control does not work.	– Is the transmitter oriented toward the Remote Control sensor on the TV ? – Do you operate the Remote Control within 7 m from the receiving windows ? – Are there any obstacles between the Remote Control and the RemoteControl sensor ? – Are the batteries dead ? – Are the batteries fitted properly ? – Is the Remote Control sensor being exposed to sunlight or strong flourescent light ?
The cassette tape is ejected immediately after insertion	Is DEW CONDENSATION displayed on the screen ? – Wait for a while until the indication disappears. Is PICTURE RECORDING mode on ? – When a tape with erasure prevention tab removed has been inserted, in PROGRAMME TIMER RECORDING mode, the tape is automatically ejected.
The TV does not operate although the power switch is ON	Various safety devices have been triggered. – Switch off the main power supply and switch it on again, after a few minutes.
PICTURE RECORDING mode can not be switched on.	– Has the record tab been removed from the tape ? – Is the PROGRAMME TIMER RECORDING mode on ?
PROGRAMME TIMER RECORDING mode can not be switched on.	– Is the present time set properly ? – Has the record tab been removed from the tape ? – Are the starting time and ending time set properly ? – Has the TIMER RECORDING button been pushed ?
No colour in picture reproduction on tape playback.	Has tracking been adjusted ? – Adjust the tracking.
Snowy picture on tape playback.	Are the Video heads dirty ? – Request professional Service. Are the video heads worn out ? Replace them. Is the tape old ?
Flickering	Is the tape old ?
The digits of the counter do not change, during tape playback.	Is a non–recorded part of the tape being played back ? – When a non–recorded part of the tape is played back, the screen becomes blue and the tape counter does not advance.
The pictured sourced from AV INPUT shakes or does not work.	Such symptoms may occur when the input is set to AV INPUT and no signal is received at the video input terminals.
When a tape recorded by PAL systems of 3 times the normal speed is playback after fast forwarding or rewinding, the colour tends to fade out.	This is caused by safety devices triggered by erronous functioning.

Troubleshooting

Before calling for service, determine the symptoms and make a few simple checks as shown below.

Symptoms		Check
Picture	Sound	
Snowy Picture	Noisy Sound	Aerial Location, direction Connection
Multiple Image	Normal Sound	Aerial Location, direction Connection
Interference	Noisy Sound	Electrical Appliances Cars / Motorcycles Fluorescent Lamps
Normal Picture	No Sound	Volume Check whether the mute function has been activated on the Remote Control.
No Picture	No Sound	Not plugged into AC outlet Not switched on Contrast and Brightness / Volume Setting (Check by pushing the Power Switch or Stand–by Button on the Remote Control.)
No Colour	Normal Sound	Colour Control
 Scrambled	Normal or Weak Sound	Re–tune Channels
Colour Patches	Normal Sound	Magnetic interference from unshielded equipment. Receiver moved while "ON".
No Colour Rolling Picture H–Line	Noisy Sound	System Button

Specifications

	TC–14SV10S, TC–21SV10S	TC–21SV10M, TC–14SV10M	TC–21SV10H, TC–14SV10H
Power Source	AC 110 – 240 V, 50 / 60 Hz	AC 220 – 240 V, 50 Hz	AC 200 – 220 V, 50 Hz

Power Consumption	TC–21SV10S, TC–21SV10M, TC–21SV10H	TC–14SV10S, TC–14SV10M, TC–14SV10H
	114 W Stand–by condition 41 W (VCR REC) 5 W (VCR STOP)	90 W Stand–by condition 41 W (VCR REC) 5 W (VCR STOP)

Receiving Systems

	System	TC–14SV10S TC–21SV10S	TC–14SV10M TC–21SV10M	TC–14SV10H TC–21SV10H	Function
1.	PAL B, G, H	○	○	–	Reception of broadcast transmissions and play back from video Cassette Tape Recorders
2.	PAL I	–	–	○	
3.	PAL D, K	○	–	○	
4.	SECAM B, G	○	–	–	
5.	SECAM D, K	○	–	–	
6.	SECAM K1	○	–	–	
7.	NTSC 4.43 / 5.5 MHz	○	○	–	Playback from Special VCR's
8.	NTSC 4.43 / 6.0 MHz	–	–	○	
9.	NTSC 4.43 / 6.5 MHz	○	–	○	
10.	NTSC 3.58 / 5.5 MHz	○	○	–	
11.	NTSC 3.58 / 6.0 MHz	–	–	○	
12.	NTSC 3.58 / 6.5 MHz	○	–	○	
13.	PAL 60Hz / 5.5 MHz	○	○	–	Playback from Special Disc Player's and Special VCR's
14.	PAL 60Hz / 6.0 MHz	–	–	○	
15.	PAL 60Hz / 6.5 MHz	○	–	○	

Receiving Channels	TC–14SV10S, TC–21SV10S	TC–14SV10M, TC–21SV10M	TC–21SV10H, TC–14SV10H
	VHF 2 – 12 (PAL / SECAM B, K1) 1 – 12 (PAL / SECAM D) UHF 21 – 69 (PAL G, H, I SECAM G, K, K1) 13 – 57 (PAL D, K) CATV S1 – S20 (OSCAR) S21 – S41 (HYPER) Z1 – Z37 (CHINA)	VHF 2 – 12 (PAL B) 0 – 12 (PAL B AUSTRALIA) 1 – 9 (PAL B N. ZEALAND) UHF 21 – 69 (PAL G, H) 28 – 69 (PAL B AUSTRALIA) CATV S1 – S20 (OSCAR) S21 – S41 (HYPER) 5A – 9A (AUSTRALIA)	VHF 1 – 12 (PAL D) UHF 21 – 69 (PAL I) 13 – 57 (PAL D, K) CATV S1 – S20 (OSCAR) S21 – S41 (HYPER) Z1 – Z37 (CHINA)

Tuning System	Frequency synthesizer Auto Search Tuning 60 Position

Picture Tube	TC–21SV10S, TC–21SV10M, TC–21SV10H	TC–14SV10S, TC–14SV10M, TC–14SV10H
	Overall Picture tube measured diagonally 54 cm Viewable Picture tube measured diagonally 51 cm CRT deflection : 90 °	Overall Picture tube measured diagonally 36 cm Viewable Picture tube measured diagonally 34 cm CRT deflection : 90 °

Audio Output	3 W (max)
Headphones	impedance 8 Ω , 3.5 mm Plug
Aerial Impedance	75 Ω Unbalanced coaxial

Specifications

			NTSC 3.58	NTSC 4.43	SECAM	PAL	
Audio/Video Terminals (TC–21SV10S, TC–14SV10S)	AV	Video In Audio In	○	○	○	○	1 Vp –p, 75 Ω Approx. 400 mV 47 kΩ
	VCR OUT	Video Out Audio Out	—	○	○	○	1 Vp –p, 75 Ω Approx. 400 mV 1 kΩ
Audio/Video Terminals (TC–21SV10M, TC–14SV10M) (TC–21SV10H, TC–14SV10H)	AV	Video In Audio In	○	○	—	○	1 Vp –p, 75 Ω Approx. 400 mV 47 kΩ
	VCR OUT	Video Out Audio Out	—	○	—	○	1 Vp –p, 75 Ω Approx. 400 mV 1 kΩ

Video Recording System	2 rotary heads, herical scanning system.	
Record and Playback	TC–21SV10M, TC–14SV10M TC–21SV10H, TC–14SV10H	TC–21SV10S, TC–14SV10S
	Record (PAL) Playback (NTSC and PAL)	Record (PAL and MESECAM) Playback (NTSC, PAL and MESECAM)
Tape Speed	3.33 cm/sec (NTSC) 2.339 cm/sec (PAL)	
Record/Playback Time	180 min. with T–180 tape (NTSC) 240 min. with E–240 tape (PAL)	
Television System	525 lines, 60 fields (NTSC) 625 lines, 50 fields (PAL)	
Tape Format	VHS Tape	
FF/REW Time	Approx. 2 min. 30 sec (with E–180 tape)	
Modulation System	Luminance : FM azimuth recording Colour Signal : converted subcarrier phase shift recording	
Audio Track	1 track (mono only)	
Operating Temperature	5 ° C – 40 ° C	
Operating Humidity	35 % – 80 %	
Accessories Supplied	TC–21SV10S, TC–21SV10M, TC–21SV10H	TC–14SV10S, TC–14SV10M, TC–14SV10H
	Remote Control Transmitter R6 (AA) Battery x 2	Remote Control Transmitter R6 (AA) Battery x 2
Dimension (W x D x H)	527 x 479 x 500 mm	400 x 383.5 x 371 mm
Weight (Mass)	25.0 kg (Net)	14.0 kg (Net)

Note :
Design and Specifications are subject to change without notice.
Weight and Dimensions shown are approximate

Customers's Record

The serial number of this product can found on rear cover. You should note this serial number in the space provided below and retain this book plus your purchase receipt as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purpose.

Model Number_____ Serial Number_____

Matsushita Electric Industrial Co., Ltd

Central P.O. Box 288, Osaka 530–91, Japan